

AMENDMENTS TO SPECIFICATION

Please replace paragraph 23 in the specification with the following replacement paragraph:

[0023] On the other hand, if the error-control decoder 103 determines that there are uncorrectable errors 201, then the system may determine if the resulting uncorrectable errors are ~~cause a~~ data poisoning (DP) ~~[[error]] events~~ 203. In particular, a system may be designed so that DP events ~~errors~~ correspond to resident data units found in certain storage locations (e.g., cache 102, or memory 100 or 104) or during its transmission to or from these storage locations over a bus (e.g., bus 105, 107, or 108). Alternatively, the system may be designed to check for errors in data units in other portions of the system. In summary, the system designer may decide what uncorrectable errors are designated as being DP ~~errors~~ events and which, if any, are not (block 220).

Please replace paragraph 24 in the specification with the following replacement paragraph:

[0024] If an uncorrectable error situation arises that is not a DP ~~[[error]] event~~, the corresponding data unit, including the erroneous data, may ~~have been~~ be consumed (i.e., by an application running on the computer system or by the operating system); the process, ~~accordingly~~, may skip to block 206 (~~when that data unit is consumed~~).

Please replace paragraph 25 in the specification with the following replacement paragraph:

[0025] If an uncorrectable error situation corresponds to a DP ~~[[error]] event~~, then a DP flag associated with the corresponding data unit may be set 204. If the system has a policy for addressing DP events or errors 205, in which immediate notification (action) occurs, the process may continue to block 206. Otherwise, the error may only be reported for logging 202. Note that whether the system provides immediate notification is an option that may be determined by a system designer or by a system operator, for example, in block 220, [[in]] depending upon the particular system.

Please replace paragraph 29 in the specification with the following replacement paragraph:

[0029] In a further variation on the above method and computer system, it may be possible for either the operating system or the system designer to select whether or not to invoke a data poisoning method as described above. Implementing such a feature, for example, in block 220, may permit the system designer or operator to select an error-handling technique in accordance with system requirements. For example, there may be a software-visible control bit that permits the selection of either immediate notification of an uncorrectable error situation (i.e., invoking a policy of addressing data poisoning events; see FIG. 2, reference numeral 205) or to defer notification (i.e., to let the OS detect if data contains uncorrected errors). If so, the detection of whether this control bit has been set may occur in block ~~[[205]]~~ 206 of FIG. 2.